

044967

OIPE  
#2

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002  
TIME: 09:03:27

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

1 <110> APPLICANT: Shokat, Kevan M.  
 2 <120> TITLE OF INVENTION: High Affinity Kinase Inhibitors for Target Validation  
 3 and Uses Thereof  
 4 <130> FILE REFERENCE: 51538-5001-US  
 5 <140> CURRENT APPLICATION NUMBER: US/10/044,967  
 6 <141> CURRENT FILING DATE: 2002-01-15  
 8 <150> PRIOR APPLICATION NUMBER: 09/480,993  
 9 <151> PRIOR FILING DATE: 2000-01-11  
 12 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/115,340  
 W--> 13 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1999-01-11  
 14 <160> NUMBER OF SEQ ID NOS: 20  
 15 <170> SOFTWARE: PatentIn Ver. 2.1  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 27  
 19 <212> TYPE: PRT  
 20 <213> ORGANISM: Homo sapiens  
 21 <400> SEQUENCE: 1  
 22 Asn Phe Pro Phe Leu Val Lys Leu Glu Phe Ser Phe Lys Asp Asn Ser  
 23 1 5 10 15  
 24 Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly  
 25 20 25  
 27 <210> SEQ ID NO: 2  
 28 <211> LENGTH: 27  
 29 <212> TYPE: PRT  
 30 <213> ORGANISM: Rous sarcoma virus  
 31 <400> SEQUENCE: 2  
 32 Asn His Pro Asn Ile Val Lys Leu Leu Asp Val Ile His Thr Glu Asn  
 33 1 5 10 15  
 34 Lys Leu Tyr Leu Val Phe Glu Phe Leu His Gln  
 35 20 25  
 37 <210> SEQ ID NO: 3  
 38 <211> LENGTH: 26  
 39 <212> TYPE: PRT  
 40 <213> ORGANISM: Rous sarcoma virus  
 41 <400> SEQUENCE: 3  
 42 Arg His Glu Lys Leu Val Gln Leu Tyr Ala Val Val Ser Glu Glu Pro  
 43 1 5 10 15  
 44 Ile Tyr Ile Val Ile Glu Tyr Met Ser Lys  
 45 20 25  
 47 <210> SEQ ID NO: 4  
 48 <211> LENGTH: 30  
 49 <212> TYPE: DNA  
 50 <213> ORGANISM: Rous sarcoma virus

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002  
TIME: 09:03:27

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

```

51 <400> SEQUENCE: 4
52     tttggatcca tggggagtag caagagcaag          30
54 <210> SEQ ID NO: 5
55 <211> LENGTH: 30
56 <212> TYPE: DNA
57 <213> ORGANISM: Rous sarcoma virus
58 <400> SEQUENCE: 5
59     tttgaattcc tactcagcga cctccaaacac          30
61 <210> SEQ ID NO: 6
62 <211> LENGTH: 26
63 <212> TYPE: DNA
64 <213> ORGANISM: Rous sarcoma virus
65 <400> SEQUENCE: 6
66     tgagaagctg gctcaactgt acgcag          26
68 <210> SEQ ID NO: 7
69 <211> LENGTH: 26
70 <212> TYPE: DNA
71 <213> ORGANISM: Rous sarcoma virus
72 <400> SEQUENCE: 7
73     ctgcgtacag ttgagccagc ttctca          26
75 <210> SEQ ID NO: 8
76 <211> LENGTH: 24
77 <212> TYPE: DNA
78 <213> ORGANISM: Rous sarcoma virus
79 <400> SEQUENCE: 8
80     ctacatcgtc gctgagtaca tgag          24
82 <210> SEQ ID NO: 9
83 <211> LENGTH: 24
84 <212> TYPE: DNA
85 <213> ORGANISM: Rous sarcoma virus
86 <400> SEQUENCE: 9
87     ctcatgtact cagcgacgat gtag          24
89 <210> SEQ ID NO: 10
90 <211> LENGTH: 7
91 <212> TYPE: PRT
92 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence: Imaginary
95 sequence for enzyme modelling
96 <400> SEQUENCE: 10
97     Asp Met Phe Arg Asp Lys Glu
98         1           5
100 <210> SEQ ID NO: 11
101 <211> LENGTH: 7
102 <212> TYPE: PRT
103 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Description of Artificial Sequence: Imaginary
106 sequence for enzyme modelling

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002

TIME: 09:03:27

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

107 <400> SEQUENCE: 11  
108 Asp Met Ile Arg Glu Lys Asp  
109 1 5  
111 <210> SEQ ID NO: 12  
112 <211> LENGTH: 8  
113 <212> TYPE: PRT  
114 <213> ORGANISM: Artificial Sequence  
115 <220> FEATURE:  
116 <223> OTHER INFORMATION: Description of Artificial Sequence: Optimized  
117 substrate for src kinases  
118 <400> SEQUENCE: 12  
119 Ile Tyr Gly Glu Phe Lys Lys Lys  
120 1 5  
122 <210> SEQ ID NO: 13  
123 <211> LENGTH: 12  
124 <212> TYPE: PRT  
125 <213> ORGANISM: Artificial Sequence  
126 <220> FEATURE:  
127 <223> OTHER INFORMATION: Description of Artificial Sequence: Optimized  
128 substrate for Abl  
129 <400> SEQUENCE: 13  
130 Glu Ala Ile Tyr Ala Ala Pro Phe Ala Lys Lys Lys  
131 1 5 10  
133 <210> SEQ ID NO: 14  
134 <211> LENGTH: 40  
135 <212> TYPE: PRT  
136 <213> ORGANISM: Rous sarcoma virus  
137 <220> FEATURE:  
138 <223> OTHER INFORMATION: v-Src kinase  
139 <400> SEQUENCE: 14  
140 Arg His Glu Lys Leu Val Gln Leu Tyr Ala Met Val Ser Glu Glu Pro  
141 1 5 10 15  
142 Ile Tyr Ile Val Ile Glu Tyr Met Ser Lys Gly Ser Leu Leu Asp Phe  
143 20 25 30  
144 Leu Lys Gly Glu Met Gly Lys Tyr  
145 35 40  
147 <210> SEQ ID NO: 15  
148 <211> LENGTH: 40  
149 <212> TYPE: PRT  
150 <213> ORGANISM: Homo sapiens  
151 <220> FEATURE:  
152 <223> OTHER INFORMATION: c-Fyn kinase  
153 <400> SEQUENCE: 15  
154 Lys His Asp Lys Leu Val Gln Leu Tyr Ala Val Val Ser Glu Glu Pro  
155 1 5 10 15  
156 Ile Tyr Ile Val Thr Glu Tyr Met Asn Lys Gly Ser Leu Leu Asp Phe  
157 20 25 30  
158 Leu Lys Asp Gly Glu Gly Arg Ala  
159 35 40

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002  
TIME: 09:03:27

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

```

161 <210> SEQ ID NO: 16
162 <211> LENGTH: 41
163 <212> TYPE: PRT
164 <213> ORGANISM: Homo sapiens
165 <220> FEATURE:
166 <223> OTHER INFORMATION: c-Abl kinase
167 <400> SEQUENCE: 16
168     Lys His Pro Asn Leu Val Gln Leu Leu Gly Val Cys Thr Arg Glu Pro
169         1           5           10          .      15
170     Pro Phe Tyr Ile Ile Thr Glu Phe Met Thr Tyr Gly Asn Leu Leu Asp
171         20          25          .          30
172     Tyr Leu Arg Glu Cys Asn Arg Gln Glu
173         35          40
175 <210> SEQ ID NO: 17
176 <211> LENGTH: 39
177 <212> TYPE: PRT
178 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
180 <223> OTHER INFORMATION: CamK II, calcium/calmodulin-dependent kinase
181 <400> SEQUENCE: 17
182     Lys His Pro Asn Ile Val Arg Leu His Asp Ser Ile Ser Glu Glu Gly
183         1           5           10          .      15
184     His His Tyr Leu Ile Phe Asp Leu Val Thr Gly Gly Glu Leu Phe Glu
185         20          25          .          30
186     Asp Ile Val Ala Arg Glu Tyr
187         35
189 <210> SEQ ID NO: 18
190 <211> LENGTH: 40
191 <212> TYPE: PRT
192 <213> ORGANISM: Homo sapiens
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Cdk2, cyclin-dependent kinase
195 <400> SEQUENCE: 18
196     Asn His Pro Asn Ile Val Lys Leu Leu Asp Val Ile His Thr Glu Asn
197         1           5           10          .      15
198     Lys Leu Tyr Leu Val Phe Glu Phe Leu His Gln Asp Leu Lys Lys Phe
199         20          25          .          30
200     Met Asp Ala Ser Ala Leu Thr Gly
201         35          40
203 <210> SEQ ID NO: 19
204 <211> LENGTH: 42
205 <212> TYPE: PRT
206 <213> ORGANISM: Saccharomyces cerevisiae
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Cdc28, cyclin-dependent kinase
209 <400> SEQUENCE: 19
210     Lys Asp Asp Asn Ile Val Arg Leu Tyr Asp Ile Val His Ser Asp Ala
211         1           5           10          .      15
212     His Lys Leu Tyr Leu Val Phe Glu Phe Leu Asp Leu Lys Arg

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002  
TIME: 09:03:27

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

213               20               25               30  
214   Tyr Met Glu Gly Ile Pro Lys Asp Gln Pro  
215               35               40  
217 <210> SEQ ID NO: 20  
218 <211> LENGTH: 42  
219 <212> TYPE: PRT  
220 <213> ORGANISM: Saccharomyces cerevisiae  
221 <220> FEATURE:  
222 <223> OTHER INFORMATION: Fus3, mitogen-activated kinase  
223 <400> SEQUENCE: 20  
224   Lys His Glu Asn Ile Ile Thr Ile Phe Asn Ile Gln Arg Pro Asp Ser  
225       1               5               10               15  
226   Phe Glu Asn Phe Asn Glu Val Tyr Ile Ile Gln Glu Leu Met Gln Thr  
227       20               25               30  
228   Asp Leu His Arg Val Ile Ser Thr Gln Met  
229       35               40

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/044,967

DATE: 02/07/2002

TIME: 09:03:28

Input Set : N:\Crf3\RULE60\10044967.raw  
Output Set: N:\CRF3\02072002\J044967.raw

L:13 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD